CALFED Ops and Tools Meeting Minutes

November 24,1998

Present:

Tim Quinn (co-chair) MWDSC Mike Spear (co-chair) USFWS Lester Snow CALFED Patrick Wright USEPA Roger Patterson USBR Greg Gartrell CCWD Jim Lecky NMFS Dan Nelson(by phone) SLDMWA Tom Clark KCWA Rvan Broddrick CDF&G Gary Bobker TBI Curtis Creel DWR Spreck Rosekrans EDF AJ Yates DF&A Allan Short MID Elise Holland TBI Pete Rhoads MWDSC

Mike Thabault USFWS Berry Herrgessell CDF&G Bruce Herbold USEPA Gary Stern NMFS Patrick Leonard USFWS Mike Fris USFWS Lowell Ploss USBR Grace Chan MWDSC Pete Chadwick CDF&G Dave Briggs CCWD George Barnes DWR Jim White CDF&G Steve Ritchie CALFED Ron Ott CALFED Dick Daniel CALFED Mark Cowin CALFED Ed Winkler MWDSC Jim Snow DWR

Opening Remarks

Mike Spear- Looking for a combination of prescriptive standards and an environmental water account (EWA) that moves us progressively towards recovery of the species.

Tim Quinn- Looking for a workable combination of water and dollars for an EWA that would allow non-continuous management for supply, fish, and quality.

EWA Presentation by Dave Fullerton and Bruce Herbold Questions and Observations

AJ Yates- For future presentations the default pumping curve needs to represent a realistic view on the present pumping regime.

Tim Quinn- What happens to if we fail to refill San Luis after use of EWA?

Gary Bobker- EWA may result with requirements from upstream storage. May need two separate accounts, upstream and Delta.

Ed Winkler- Need to make sure that accounting reflects water actually received by users.

Dick Daniel- ERP flows released in streams should not be captured as EWA credits.

Spreck Rosekrans- How does the trading of water and storage factor into EWA?

Dan Nelson- Is EWA a running amount that could carry over form year to year? May use the principle that if there is no harm to any party, it's ok.

Tim Quinn- Contract system should not preclude adding in other types of credits.

Tim Quinn- Need to determine what portion of the EWA comes from purchases and what from forecast amounts of water savings and is there a possibility of combination?

Core themes:

- We all have resource limitations.
- We all need to invest to improve them.
- EWA is the only way to go.
- Will give continuous improvement to fish.

Where does credits come from?

- Endowment
- Shared investments
- purchase of water in place
- Contracts

What Decisions Are Needed?

9. Other uses of ecosystem water

Mike Spear-Should ecosystem manager act as water manager?

Water managers would be concern about ecosystem manager selling water.

Dan Nelson-environmental water may be saleable depending on conditions. If all agreed to pursue would be open to the notion.

Ed Winkler- Could translate water into cash, both could be managed by ecomanager.

Mike Spear Summary-

- Water users concern that water is sold that has been just taken away.
- May have storage and/conveyance in account
- Treat ecosystem as a user (water supply agency)

Tim Quinn- Can you sell environmental water allocation? Yes, depending on package. Concerns about resale of "taken water"

8. Carryover of ecosystem credits from year to year

Ecosystem assets and carryover of debt

Mike Spear-May have to continuously add to account to reduce risk to fish. Made need a huge up-front account if not able to carry over.

Dan Nelson- May have constraints on the ability to move water. What is priority in existing and new storage?

Gary Bobker-Need to include more of south of Delta storage. Need to look upstream also.

Tim Quinn-May agree to carry over if storage capacity is available. Need to decide who spills first.

Spreck Rosekrans-Need to look at real water not theoretical credits.

Tom Clark-Could carryover (debit/credits) if no harm to users.

2

Roger Patterson-

- Carryover would depend on the whole package, upstream and downstream, and a determination of who's water spills first.
- Can't carryover phantom water, must be real.
- Sharing of existing storage depends on total package
- Could work temporary deals (one year)
- How do we handle new storage.

Dan Nelson-

- Contractors have base supply
- New storage makes right to carryover easier.
- Could rent storage from existing sources.
- Could treat ecosystem more like a contractor. i.e. like purchasing water from a water district.
- Could fund water conservation and reclamation.

Mike Spear Summary- Yes we need EWA but:

- Early on may have physical constraints
- May share risk with water agency
- May need to replace every year.
- Carryover issues upstream and downstream
- Need to look at new supply every year

Tim Quinn- Summary of Carryover:

- Is related to environmental priorities for existing system
- Both up and downstream.
- Yes, but subject to spill
- Must be for "real water" not phantom water which could engulf all reservoirs.
- Sharing existing storage will depend upon package.
- New storage is different and easier
- Possible to "rent" existing storage.
- Base supply as part of solution.

4. Environmental priorities for existing storage and conveyance facilities

Mike Spear-How is it related to starting year, what is base account each year, and what is the source of initial supply?

Dave Fullerton-

- May be direct competition for the conveyance capacity. May need a priority system on access to capacity.
- Modeling to date does shows there is conveyance capacity in the present system.
- Need to look at relationship of capacity in system verses reliability to users.
- If capacity is linked to ESA certainty, makes it much easier to schedule sharing.
- Sharing is the same as using capacity more predictability.

Ryan Broddrick-May have capacity now but it will be diminishing with increased demands...

Lowell Ploss-Need to look at constrains that hamper movement of water.

Gary Bobker-How do we address the San Joaquin side of system. Need to work at getting attainable and assureable San Joaquin River Flows.

Mike Spear-Would have separate EWA for San Joaquin and if you can covert to money may work.

Roger Patterson-Already have an account on the San Joaquin.

Dan Nelson-Do we have a separate account for upstream and downstream?

Jim Lecky-Do we have a separate account for habitat.

Lester-Only one ecosystem account, not multi accounts in the future.

Tim Quinn-Summary

- Have more conveyance than room to store.
- Shared schedule capacity for environment in context of overall package.
- It is a function of the certainty you have to make it up later.
- Risk will be a function of certainty. More certainty means more sharing.
- Shared schedule capacity is possible if there is more certainty in system (i.e. ESA)

Mike Spear Summary

- Concern about affects on water market of conveyance.
- Model to date with JPOD seems to show conveyance ok.
- With certainty water users will schedule more corporately which will make space.

10. Initial funding and amount and type of ecosystem credits.

Mike Spear-On day one what's the ability of the environment to call on credits?

Mike Spear- On January 1, 2000 where is the water in the account?

Dave Fullerton-

- Environmental water contract that would put water in San Luis.
- Ecomanager gets an endowment of water and dollars that could be used.
- Need to work out principles of day 1 water and money.
- Money could be used for multipurpose.
- Several options to fill EWA::
 - -Option Contracts (e.g. with MWD for storage in Eastside)
 - -Prebank Water
 - -Convert actions such as JPOD,ISDP,E/I into credits (replenish able each year)
 - -Take a certain percentage of actions as EWA credits.
 - -Eliminate E/I and put water in EWA.

Spreck Rosekrans- Start October not January 1.

Ed Winkler- Will CALFED inter into a lease with Kern WB or use options?

Dave Fullerton- EWA could gain water from:

- Convert money to water
- Constraint Options
- Storage Upstream/Downstream
- Curtailment effect mitigation

4

- Regulatory flexibility
- E/I ratio- Conservative estimate on what water you get from relaxation and handle like CVP/SWP.
- Would focus on option agreements to keep from conflicting with carryover.

Mike Spear Summary:

- Translate JPOD, E/I into EWA
- Agree with water and money
- Can convert to water in place from reclamation and conservation.
- Prebank water in ground
- Improvements in export system.
- Eliminate E/I ratio.
- Transfers will be ok if stay south of Delta.

Tim Quinn summary:

- Size of account will depend on initial funding and type of ecosystem credits
- Day 1, contracts, both money and water endowed, in hand.
- Prebank Water
- Concert agreed improvements to contract asset
- Eliminate E/I in water
- Difficult bundle of issues: default rules (who pays, combo of water and money)
- Initial year allocation. Like water users 90% allocation etc.

6. Regulatory Uncertainty

Tim Quinn-How comfortable are agencies using a stagged approach to recovery?

Mike Spear- Need a set of rules for 7-10 years that progressively moves us toward recovery if we continue. Would have to deal with outliers

Dan Nelson- Need to make sure we stay just as aggressive on non-water related issues such as exotics, harvest, hatcheries. Can you trade between flow and habitat? Has some concerns.

Mike Spear-Focus on flow issues here. Can we design a EWA to trade off with more prescriptive standards?

Elise Holland-May have to phase in regulatory certainty.

Dan Nelson-Has to be legally enforceable to all parties.

Mike Spear Summary-

- 7-10 years contracts
- No outliers
- Mutual Interests
- Deal with unforeseen problems
- create flows account for 7-10years
- legally enforceable for all parties

Tim Quinn-Summary

7-10 year deal.

- Base should be Accord plus upstream AFRP.
- How much water do we hold constant and how much by options.
- Money for options has to be assured or no fish deal.
- Need to have contracts in place when we first start.
- Conceptual issues are biological requirements that can be solved different ways with a combination of money and water. Mostly water.
- Key issue: what would options be of fish headed for extinction.
- Need to provide certainty to all sectors fish/farms/people.
- Summary of an agreement:
 - -Combination of endowed water and money to get there.
 - -Meeting Stage I actions on Day 1: JPOD, portions of south delta actions and actions to protect water quality.
 - -CMARP- which should focus on end results not means.

2. Sharing future exports/storage capacity increases

Dave Fullerton-Flexibility to make it work. Water for more prescriptive standards. Mike Spear-Concern only get environmental water contingent on new water supplies share. Environment does not want to wait until new supplies are developed. Could decrease money to EWA as water become available. Could buy storage on a temporary bases. Restrict pumping(which may not be palatable). Would rather get to we need to go by default rules and money. Gary Bobker- Biological triggers hard to model hydrologically. There is uncertainty in biological triggers. Should start with a storage account big enough to reduce that uncertainty. Mike Spear- Generally share.

3. Sharing of pumping above default rules.

Dave Fullerton-Flexible Rules. If rules are not tight there is nothing to relax, the only decision is how to spend water.

Gary Bobker- If you vary E/I ratio don't have to go to SWRCB for approval. All E/I with existing facilities goes to EWA. New supplies flex and are shared. Need to discuss rules for sharing. Such as, all flex E/I water goes to EWA.

Spreck Rosekrans- Could make EWA by flexing E/I, JPOD, ISDP, etc.

Mike Spear-Generally do not share.

Spreck Rosekrans-EWA is rational for new storage. Problem is not the need for new storage by the need to optimize system.

Mike Spear-There is more than one beneficiary for storage. EWA is natural for new storage. Dan Nelson-Generally not sharing depends on how the total package fits together. Could pool agreements on transfers. Jointly participate in projects. Maybe have a shared drought water bank by all users (more germane in # 2)

5. Decision Making Authority

Dave Fullerton- Could be a unified manager for broader control makeup of stakeholders and agencies.

Tim Quinn- Can we move to EWA with infrastructure we have now? May have to have prearranged triggers for the broader base.

Ryan Broddrick-CMARP is critical to fast decisions. Who decides on fish? Mechanics for making it work. What are we trying to test this year? Can we achieve where we want to go? Bruce Herbold- What kind of decisions need to be made and what time period? Some are fast and others are slow.

Lester Snow- May set up a temporary process for the next 13 months especially for ecosystem. Dick Daniel-May be easier in the future to make decisions because of ERPP.

Gary Bobker- Maybe an environmental ops group(agencies) in consultation with stakeholders. Spreck Rosekrans-Can we make decisions in 1-2 day time frame to use EWA to curtail pumping?

Mike Spear- USF&W, NMFS, CDF&G would not be likely to turn over ESA decisions to another entity. Purchase of water would be ok to turn over.

Jim Lecky- Since you have water in the account would not argue who is going to pay it back. Ryan Broddrick- Would not fractionate into various accounts by species.

Tim Quinn- Need to have all three (USFWS,NMFS,CDF&G) agree before we move forward, not have ESA for each.

Mike Spear-Not setup in next 13 month have ERP and CMARP. Down the road unify towards and ecomanager. Three agencies cannot concede their authority for ESA. Like the fish ops group concept.

Curtis Creel- May have process already in operations group with consultation with fisheries agencies.

Lowell Ploss- Usual problem in ops is when you operate outside rules and who pays water. EWA will eliminate that. Fish people have to have status as water user at round table.

Gary Bobker- Three entities have to decide how to run project. Three fish agencies/SWP/CVP.

Dave Fullerton-Maybe more by contracts between parties, not just hand shake agreements.

Greg Gartrell- Need goals set in advance for groups. So they can operate fast.

Mike Spear- Have not seen any pitfalls that wouldn't let EWA work

Mike Thabault's presentation USFWS/NMFS scenario

Mike Spear- Default Ops is a prescriptive approach. USFWS/NMFS scenario is where we need to be if we used a prescriptive approach. It outlines the standards to meet regulatory requirements.

Jim Lecky- Have to compromise start-of-art screens to support upstream migration at Hood diversion.

Tim Quinn- How about water quality?

Jim Lecky- Would use DCC to ensure water quality.

Mike Thabault- QWEST water from the Hood connector not coming from the San Joaquin makes the connection to Hood less useful for the intent of QWEST. Connection to Hood would make flow patterns worse and would have to mitigate. Would close DCC, may have impacts on water quality and supply. Would not dredge Mokelumne except for ERP and flood control. Allan Short-Concerned about VAMP. Ok to move flow around the 31 days but not to extend its duration.

Mike Thabault-With this scenario the USFWS/NMFS is confident of the trajectory toward recovery of fish.

CMARP- Should be measuring to flag those biological criteria that needs to be adjusted.

Ed Winkler- Why hard wire VAMP in Hybrid?

Mike Thabault- It is a good place to start.

1. Default operational Rules

Dan Nelson-Need Hybrid run with base case:

- Accord + Upstream AFRP
- With and without Trinity releases.

Need to get back 200-250 TAF above Accord + Upstream AFRP

With both State and Federal need a total of 400-450 TAF above Accord + Upstream AFRP

Tim Quinn: State needs 200 TAF above Accord + Upstream AFRP.

Should be able to accomplish 200 TAF in the First 2 Years, the remainder by the end of Stage I.